

Emergency Response News



February 2003

IDEM assists during response actions to a plant-killing bacterium at a greenhouse in Hamilton County

The Indiana Department of Environmental Management (IDEM) teamed with the Indiana Department of Natural Resources (IDNR), Entomology & Plant Pathology Division, Indiana State Department of Health and U.S. Department of Agriculture to implement protective measures and oversee the cleanup of a bacterium affecting plants at a nursery in Noblesville, Hamilton County.

On February 21, staff from the IDNR Entomology & Plant Pathology Division called an IDEM On-Scene Coordinator when *Ralstonia solanacearum* Race 3 biovar 2, a plant-killing bacterium was confirmed in geraniums at a greenhouse. The IDNR and USDA quarantined the greenhouse. The geraniums had been shipped to Indiana from an out-of-state supplier, which had imported them from overseas.

The nursery operated an irrigation pond to water plants in the greenhouse. There was concern that a possible overflow of contaminated water in the pond could pose a threat to nearby waters of the State and could spread the bacterium to other vegetation. The bacterium does not pose a threat to humans or animals.

IDEM and the owner shored up a berm around the pond to contain potentially affected water. Two days later, the pond was leaking and water was flowing under the newly erected berm. IDEM staff ran a dye test, which confirmed water had been discharged from the pond. The owner erected an additional berm around the low end of the pond and earthen dams in the drainage swales down gradient from the pond to contain the water.

Staff from the U.S. Department of Agriculture and the IDNR required the pond to be treated to kill the bacterium. IDEM's On-Scene Coordinators added sodium hypochlorite and installed a 6-inch diameter pump to circulate water in the pond. Extremely cold temperatures and multiple layers of ice on the pond helped to destroy bacterium in the water. Indiana State Department of Health laboratory staff analyzed water samples and confirmed that the pond had been successfully treated. A private firm confirmed sediment samples.

The greenhouse operators destroyed all of the potentially infected plants as a regulatory measure.

IDEM's On-Scene Coordinators completed their activities on March 1.



Site Snapshot

IDEM Actions:

Investigated, assisted and oversaw cleanup actions of a bacterium affecting plants in a greenhouse.

Location:

Nursery in Noblesville, Hamilton County

Primary Substance of Concern:

Ralstonia solanacearum, Race 3 biovar 2, a plant-killing bacterium

Potential threats:

Impact to waters of the State and destructive to farm crops and other vegetation

For further information about IDEM's emergency response actions at this site, contact staff at the following phone numbers or at IDEM's toll free phone number (800) 451-6027:

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